Land and Water Use Report
WCP East Grand Avenue WQARF Site
Phoenix, Arizona

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March 2004

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ATTACHMENTS

ACRONYMS

ADEQ	Arizona Department of Environmental Quality
ADWR	Arizona Department of Water Resources
AMA	Active Management Area
AWS	Assured Water Supply
BTEX	benzene, toluene, ethylbenzene, and xylene
CAP	Central Arizona Project
COP	City of Phoenix
1,1-DCE	1,1-dichloroethene or 1,1-dichloroethylene
FS	Feasibility Study
LUST	leaking underground storage tank
MCL	maximum contaminant level
MTP	Michigan Trailer Park
µg/L	micrograms per liter
mg/L	milligrams per liter
PCE	tetrachloroethene or tetrachloroethylene
RI	Remedial Investigation
RO	Remedial Objective
SRP	Salt River Project
TCE	trichloroethene or trichloroethylene
TDS	total dissolved solids
VOCs	volatile organic compounds
VW&R	Van Waters & Rogers
WCP	West Central Phoenix
WQARF	Water Quality Assurance Revolving Fund

EXECUTIVE SUMMARY

Weston Solutions, Inc. (WESTON®) has prepared this Land and Water Use Report for the West Central Phoenix (WCP) East Grand Avenue Water Quality Assurance Revolving Fund (WQARF) Site for the Arizona Department of Environmental Quality (ADEQ). A Land and Water Use Report is a required part of the site Remedial Investigation (RI) in accordance with the WQARF Remedy Selection Rules, R18-16-406 (D). The purpose of the report is to gather information regarding current and foreseeable uses of land or waters that have been or are threatened to be impacted by a contaminant release.

WESTON met with various stakeholders including representatives from the City of Phoenix (COP), Salt River Project (SRP), and local property/well owners to gather information concerning the current and future land and water uses of the site property and surrounding area. Land use on the property and in the surrounding area is predominantly light industrial. The COP Planning Department has no current plans to change zoning or land use in the area.

The COP and SRP currently own and operate groundwater wells within the WCP area. The COP is not currently operating any wells within a one-mile radius of the WCP East Grand Avenue WQARF Site boundary (Figure 1-1). Due to population increases and the consequent increase in water demand, the need may exist to install additional groundwater wells in the WCP area within the next 100 years. SRP maintains two irrigation wells currently not being pumped in accordance with an agreement with the ADEQ. This agreement may remain in place until a remedy selection has been made.

Groundwater in the area is also extracted by the Michigan Trailer Park and Danone Waters of North America. Michigan Trailer Park operates a 400-foot well as the sole water supply source for the Park's residents. Danone Waters extracts water from their 952-foot well for their processing and bottling operation. Neither entity has plans to change the use of wells on their property.

1.0 INTRODUCTION

Weston Solutions, Inc. (WESTON®) has prepared this Land and Water Use Report as part of the requirements of Contract Number 99-0017-AN with the Arizona Department of Environmental Quality (ADEQ), Task Assignment 99-0148. The purpose of the Work Assignment is to complete the Remedial Investigation (RI) and Feasibility Study (FS) of the West Central Phoenix (WCP) East Grand Avenue Water Quality Assurance Revolving Fund (WQARF) Site (Figure 1-1). The Land and Water Use Report is required as a component of the RI in accordance with the WQARF Remedy Selection Rules, R18-16-406 (D).

1.1 PROCESS OVERVIEW

The process to complete the RI and select remedial objectives (ROs) begins with the completion of the Draft RI Report. Following the completion of the Draft RI Report, which includes the land and water use report, a public meeting is held to discuss the Use Report and solicit input for the selection of ROs. Typically, the public will be given 30 days to comment on the Use Report. Following the public meeting and comment period, ADEQ issues the Proposed ROs Report. The ROs chosen for a site may be based off of none, some, or all of the uses identified in the Use Report. If there is significant public interest or additional information has been discovered, an additional public meeting to discuss the ROs is held. The Final ROs Report is then prepared and included in the Final RI Report.

1.2 LAND AND WATER USE REPORT

The purpose of the Land and Water Use Report is to gather information regarding current and "foreseeable" uses of land or waters that have been or are threatened to be impacted by a contaminant release, and to project time frames for future changes in those uses. Information gathered from discussions with property owners, water providers, municipalities, and well owners are to be included in the report.

In general, this Land and Water Use Report identifies various current and potential future uses of land and water in the vicinity of the WCP East Grand Avenue WQARF Site. However, the report does not evaluate the uses, nor does it classify the use as "reasonably foreseeable". The

evaluation of uses will take place during public comment periods and public meetings and will be presented in the Proposed ROs Report.

1.3 SITE BACKGROUND

In 1982, a volatile organic compound (VOC), trichloroethene (TCE), was detected in several City of Phoenix (COP) municipal wells located in WCP. Subsequent groundwater sampling confirmed the presence of TCE at concentrations above the EPA Maximum Contaminant Levels (MCLs). ADEQ subsequently designated the area of groundwater contamination as the WCP WQARF area and recommended further study under the WQARF program. The WCP WQARF area was placed on the WQARF Priority List in 1987.

In 1998, the following five WQARF Registry sites were established pursuant to Arizona Revised Statutes (ARS) §49-287.01 within the WCP WQARF area:

- West Osborn Complex;
- West Grand Avenue;
- East Grand Avenue;
- North Canal; and
- North Plume.

Contaminants known to be present at levels above regulatory limits in the groundwater in the WCP East Grand Avenue WQARF Site include the chlorinated solvents TCE, tetrachloroethene (PCE), and 1,1-dichloroethene (1,1-DCE). The former Van Waters & Rogers (VW&R) facility, located at 2930 West Osborn Road in Phoenix, Arizona, has been identified as the primary source of contamination in the WCP East Grand Avenue WQARF Site (Figures 1-1 and 1-2). VW&R is a chemical distribution firm that operated at the West Osborn Road address from 1957 to 1970. In 1970, VW&R moved their operation to its current location on South 45th Avenue in Phoenix, Arizona (WESTON, 1998). VOPAK USA, currently operating under the name Univar, now owns VW&R.

1.4 GENERAL GROUNDWATER QUALITY

Groundwater in the WCP East Grand Avenue WQARF Site and the surrounding area generally contain concentrations of total dissolved solids (TDS) ranging from 415 milligrams per liter (mg/L) to greater than 1,000 mg/L (Brown and Pool, 1989 and Daniel, 1981). The principal ions present within local groundwater include sodium, calcium, chloride, and bicarbonate (Reeter and Remick, 1986). Salt River Project (SRP) data for TDS in wells within the WCP area range from 554 mg/L to 965 mg/L (SRP, 1999). The EPA has not set an MCL for TDS, however, there is a secondary standard of 500 mg/L TDS for drinking water. The secondary standards are non-enforceable guidelines regulating contaminants that may cause aesthetic effects in drinking water.

Based on analytical data collected by the SRP from wells located in the WCP area, other general groundwater quality parameters such as nitrate and arsenic are within current regulatory guidelines for drinking water uses (SRP, 1999). Nitrate analyses in 1999 for the two SRP wells closest to the WCP East Grand Avenue WQARF Site were below the MCL of 10 mg/L as were data collected by USGS in 1980 to 1985 (Brown and Pool, 1989). Arsenic was not detected in SRP samples and was typically below 0.074 mg/L in USGS data.

Several facilities near the WCP East Grand Avenue WQARF Site boundary have had releases from underground storage tank systems and appear in the ADEQ leaking underground storage tank (LUST) database. Of these LUST sites, the former Fedmart facility, located adjacent to the VW&R facility on the current Shamrock Towing property; and the Southwest Roofing facility on the current United Parcel Service property, located approximately 1,500 feet southwest of the VW&R facility, have the greatest potential impact to groundwater quality beneath the WCP East Grand Avenue WQARF Site.

Concentrations of benzene, toluene, ethylbenzene, and xylene (BTEX) in groundwater samples collected from wells associated with the former Fedmart facility have exceeded regulatory limits. One groundwater monitor well installed at the Fedmart facility was included in groundwater sampling conducted for the WCP East Grand Avenue WQARF Site RI. The maximum concentration of benzene detected in samples from that well was 7,000 µg/L. The Arizona

Aquifer Water Quality Standard (AWQS) for benzene is 5 µg/L. Approximately 80 gallons of free product were bailed from the wells at the facility in 2002. No other active remediation systems are currently in place at the Fedmart facility.

An air sparging remediation system was installed and became operational in January 2001 at the Southwest Roofing facility. Southwest Roofing monitor wells MWB-4, MWB-5, and MWB-6 were included in the WCP East Grand Avenue WQARF Site groundwater-sampling network. MWB-14 was added to the sampling network toward the end of the sampling period. Concentrations of BTEX in these wells were below detection or below the AWQSs. Groundwater elevation data collected during sampling indicate the presence of a groundwater mound at the Southwest Roofing and UPS properties. The mound appeared concurrently with the start of air sparging activities in January 2001 and is believed to be a result of those activities.

2.0 USE EVALUATION

The following sections outline current and foreseeable land and water uses for the WCP East Grand Avenue WQARF Site and the surrounding area. Reasonably foreseeable uses for land are those uses of land likely to occur at the site within a reasonable time period. Reasonably foreseeable uses of water are those likely to occur within 100 years unless a longer time period is shown to be reasonable based on site-specific circumstances [A.A.C. R18-16-406(D)].

A list of contacts, meetings, and interviews conducted as part of the use evaluation is presented in Table 2-1.

2.1 LAND USES

Development in the area occurs consistent with zoning laws and must go through a site-planning review and permit process. Current zoning districts in the Site area are identified below and a more detailed description of COP zoning designations can be found in Table 2-2. The property lies within the southern portion of Alhambra Village and is bordered by the villages of Maryvale on the west and south, and Encanto on the east. Each village located within the COP has a Planning Coordinator who has input into planning decisions for that community. Contact information for the Village Planning Coordinators can be found in Table 2-3.

2.1.1 Current Site-Specific Land Use

Century Wheel and Rim, a distributor of undercarriage and transportation parts, currently occupies the former VW&R property and has stated that there are no foreseeable changes to the use of the property. The property is owned by Bakala Investment Properties, L.L.C. The current zoning designation for the facility is A-1, Light Industrial (COP, 2001a).

2.1.2 Current Regional Land Use

The current land use surrounding the WCP East Grand Avenue WQARF Site is predominantly A-1 (Light Industrial) and A-2 (Industrial) (Figure 2-1). Residential areas (Zoned R-5 and R1-6) lie approximately 1,800 feet to the east of the VW&R facility and approximately 3,700 feet to the southwest. Various commercial zones also border the area.

2.1.3 Future Land Use

Meetings with the COP Planning Department, including the Alhambra and Maryvale planning coordinators, indicated that there are no foreseeable plans to alter current zoning districts in the WCP East Grand Avenue WQARF Site vicinity, nor are there any special projects in the area. However, property owners can file to change the zoning designation of their property. Requests for zoning changes must go through a public hearing and be approved by the City Council prior to finalization.

2.2 GROUNDWATER USES

The WCP East Grand Avenue WQARF Site lies within the Phoenix Active Management Area (AMA) created by the Arizona Groundwater Management Code passed in 1980. All groundwater legally withdrawn from any AMA must occur under a groundwater right or permit, unless groundwater is being withdrawn from an exempt well. An exempt well is defined as having a maximum discharge capacity of 35 gallons per minute or less. All exempt wells must be registered with the Arizona Department of Water Resources (ADWR). Non-exempt wells have a discharge capacity greater than 35 gallons per minute and are associated with one of the following types of rights or permits (ADWR, 2001a):

- Grandfathered rights—derived from past individual water use. There are three types of grandfathered rights:
  - Irrigation grandfathered rights;
  - Type 1 non-irrigation grandfathered rights;
  - Type 2 non-irrigation grandfathered rights;
- Service area rights—allow cities, towns, private water companies and irrigation districts to withdraw groundwater to serve their customers; or
- Withdrawal permits—allow new withdrawals of groundwater for non-irrigation uses within AMAs. There are eight types of withdrawal permits covering various groundwater uses that are subject to different requirements. Examples of withdrawal permits include general industrial use permits, dewatering permits, and poor-quality groundwater-withdrawal permits.

Grandfathered rights are derived from past individual water use. An irrigation grandfathered right is the right to use groundwater to irrigate specific acres of land. The amount of

groundwater that can be used is specified in the right; however, the amount will vary over time according to a formula established in the management plans. A Type 1 non-irrigation right is associated with land permanently retired from farming and converted to a non-irrigation use. The maximum amount of groundwater that may be pumped each year using a Type 1 right is three acre-feet per acre of land. An irrigation grandfathered right and a Type 1 non-irrigation right may not be sold apart from the associated land. Figure 2-2 presents irrigation grandfathered rights and Type 1 non-irrigation rights in the WCP East Grand Avenue WQARF Site area.

Groundwater withdrawn under a Type 2 right can only be used for a non-irrigation purpose. Type 2 rights are the most flexible because they can be sold separately from the land or well. In addition, the owner of a Type 2 right may, with ADWR approval, withdraw groundwater from a new location within the same AMA.

Groundwater wells having either grandfathered Type 2 irrigation rights (private use) or service area permits (municipal and utility use) within a one-mile radius of the VW&R facility have been identified and are presented in Table 2-4.

There are approximately 280 registered wells in the area that are permitted to withdraw groundwater to monitor aquifer conditions. A list of these wells is included in Attachment A for reference.

The following sections present detailed information regarding specific uses of wells in or near the WCP East Grand Avenue WQARF Site.

2.2.1 Municipal and Utility Groundwater Use

The COP and SRP pump groundwater to a certain degree to satisfy their customer needs. The following sections discuss the current and future groundwater uses of the COP and SRP.

2.2.1.1 City of Phoenix

The COP receives water from four major sources: SRP, the Colorado River through the Central Arizona Project (CAP), reclaimed water, and groundwater (COP, 2000). The portion of water supplied by SRP is from reservoirs on the Salt and Verde Rivers and from groundwater wells.

The "On-Project" area, which refers to approximately 30 percent of the water service area entitled to water delivered by SRP, is generally south of the Arizona Canal (Figure 2-3). The WCP East Grand Avenue WQARF Site lies within the northern section of the On-Project Area. The "Off-Project and Non-member Area" is supplied primarily by CAP water, supplemented by reclaimed water and water stored at Horseshoe Dam on the Verde River. Groundwater is supplied from wells operated by the COP. Although less than 5 percent of current total water deliveries are from groundwater, the COP uses groundwater to ensure adequate supplies during drought periods and temporary water system outages (COP, 2000).

The COP owns and maintains ten wells in the WCP area (Figure 2-4). Due to water quality degradation and the establishment of more stringent drinking water quality standards in recent years, most of these wells were placed on inactive status by 1989 because the water they produce does not meet current regulatory standards (Table 2-5). COP-77 is the only COP well within a one-mile radius of the VW&R facility. This well, located north of the WCP East Grand Avenue WQARF Site near Campbell Avenue and 27th Avenue, is unused and was capped prior to 1982 (Earth Tech, 1989). The exact date and reason that COP-77 was taken out of service is unknown.

2.2.1.1.1 Future COP Needs

According to information provided by COP, the COP estimates that by 2010, 18,000 acre-feet per year of new well capacity will be needed to provide back up water supplies during future drought events (COP, 2000). The additional new well capacity is expected to increase to 140,000 acre-feet by 2050. Reportedly, these increases would require up to 80 new wells by 2050. The COP is currently drilling all of its new production wells in the northeast Phoenix area, but future expansion is limited by concerns over potential land subsidence and competing demand from Scottsdale production wells just across the Phoenix-Scottsdale boundary (COP, 2001c). The state-mandated Assured Water Supply (AWS) Rules limit the depth to which groundwater levels may be lowered through future pumping to 1,000 feet below land surface over the next 100 years. In addition, the COP anticipated that many of the northeast Phoenix wells will require expensive treatment to remove arsenic if the MCL of 10 µg/L is implemented

(COP, 2001c). The new arsenic rule became effective on February 22, 2002. The date by which systems must comply with the new 10 µg/L standard is January 23, 2006.

According to COP, possible well field expansion may occur in the WCP area despite water quality problems because groundwater elevations there are several hundred feet higher than in other potential expansion areas and arsenic levels are not a concern. The COP is unlikely to restore previously closed wells to production due to the high cost of wellhead treatment and because of other physical and ADWR regulatory limits (COP, 2001c). According to COP, it is possible, however, that existing well sites could be redrilled with new wells (COP Meeting, 2001).

COP's continued interest in future well development in the Central Phoenix wellfields led COP to the development of computerized tools that would assist the City in evaluating the suitability of groundwater resources in the Central Phoenix area. The primary goal of the project was to aid the City in evaluating the general location and timing of future groundwater resources development for the COP public water supply. As part of the project, COP evaluated the entire water service area for future well development and assigned numerical scores, based on established criteria. Based strictly on the statistical evaluation of the scores, COP indicates that areas with scores in at least the 75th percentile (scores $\langle$ 81) may warrant consideration for future well development. The area where the WCP East Grand Avenue WQARF Site is located scored 74 to 80, therefore, it may not be considered for future well development (COP, 2002).

2.2.1.2 Salt River Project

Groundwater comprises approximately 15 percent of the water supplied by SRP to municipal treatment plants; however, groundwater contribution varies seasonally with the highest contribution occurring March through August. Historically, there has been enough surface water to meet demand in only one out of every three years. During extended periods of low run off, groundwater can account for almost one-third of the total SRP water supply (SRP, 1999).

SRP operates and maintains nine irrigation wells within the WCP area (Figure 2-4). Four of these wells (11.2E-7.7N, 10.5E-7.5N, 9.5E-7.7N, and 8.5E-7.5N) have been affected by TCE contamination; two of which are within a one-mile radius of the WCP East Grand Avenue

WQARF Site (Table 2-2). The two wells are 11.2E-7.7N, which is east-northeast (upgradient) of the contaminant plume and well 10.5E-7.5N, which is located less than 2000 feet west (cross gradient) of the Site (Figure 2-2).

Groundwater beneath the WCP East Grand Avenue WQARF Site typically flows to the south-southwest; however, regional groundwater flow direction is affected during pumping in two SRP wells located in the site vicinity. Data gathered by SRP shows that concentrations of TCE increased during years of higher pumpage when compared to years of lower pumpage at well 11.2E-7.7N (SRP, 2001). Other wells in the WCP area have shown similar effects. SRP and ADEQ have had an agreement since 1999 to not pump wells located near WQARF sites in the WCP area due to these influences on contaminant plume migration. Annual pumping rates from the WCP area wells were considerably lower in the past 30 years than the previous 30 years. This was due in large part to above normal precipitation on the watershed and the increased availability of surface water through this period. In recent years, the CAP and the Arizona Water Banking Authority have made it possible for SRP to use Colorado River water in lieu of pumping groundwater.

2.2.1.2.1 Future SRP Needs

Although not in use at this time, SRP has no plans to eliminate any of the wells in the WCP area from their system. Based on demand analysis, SRP has indicated it will continue to need the wells in the area to remain operational, especially during dry years. Current monthly demand (1999-2000) for the section of the Grand Canal downstream from the WCP WQARF area ranges from less than 1,000 acre-feet in the winter months to more than 10,000 acre-feet in the peak summer months. Based on this demand, SRP anticipates that future pumping needs from the four wells affected by TCE contamination during dry years are as follows:

- 60 to 80 percent of the time during the summer months (June to August);
- 20 to 40 percent during shoulder months (March through May and September through October), and
- 0 to 10 percent during the winter months (November through February). In wet years, the wells would most likely be used minimally, if at all (SRP, 2001).

SRP indicated to ADEQ that is has future plans for the construction of a drinking water treatment plant planned at the end of the Grand Canal. If the treatment plant is constructed, overall water demand will likely increase. Additionally, a drinking water treatment plant on the Grand Canal will require that water sources discharging to the canal will comply with more stringent water quality criteria. Currently, SRP does not plan on installing any new wells in the WCP area (SRP, 2001).

2.2.2 Private Groundwater Use

Private groundwater use, or non-municipal groundwater use, in the WCP East Grand Avenue WQARF Site area consists of a domestic well used by the Michigan Trailer Park, a water supply well used by Danone Waters of North America, and an irrigation well located at 3600 West Osborn Road, owned by Capitol Liquidators.

2.2.2.1 Michigan Trailer Park

The Michigan Trailer Park (MTP), located west of the VW&R facility at 3135 Grand Avenue, is a 150-pad mobile home and RV park with a current average year-round occupancy of 90 pads. The sole water supply source for the park is from a 400-foot well (MTP-1) located on the MTP property. The well, which is cross gradient to the WCP East Grand Avenue WQARF Site and close to SRP Well 10.5E-7.5N, has an approximate pumping capacity of 85 to 100 gallons per minute and serves approximately 135 to 180 residents. The property was sold prior to the finalization of this report. However, the previous owner stated that there were no plans to remove the well from service.

An elevated nitrate concentration from a December 1999 sample caused Maricopa County to request monthly nitrate testing to investigate the need for shutting down the well. All results previous to and since the 1999 sample have been below the nitrate MCL of 10 mg/L. Maricopa County is not requiring MTP to shut down the well at this time and it is expected that the well will remain in service indefinitely.

VOC analyses have also been conducted on samples collected from MTP-1. PCE and TCE have been detected in samples collected from MTP-1; however the concentrations detected have been

below the AWQS of 5 µg/L established for each compound. PCE has been detected at a concentration of 0.8 µg/L and TCE has been detected at concentrations ranging from 0.3 µg/L to 0.6 µg/L. The analytical results for samples collected from MTP-1 are considered estimated values due to possible contaminant carryover and/or because the detected value was below the laboratory reporting limit but above the method detection limit.

2.2.2.2 Danone Waters

Danone Waters of North America, formerly owned by McKesson Water Inc., operates a water processing, bottling, and distribution plant approximately one-half mile southwest (down gradient) of the WCP East Grand Avenue WQARF Site boundary. The business has been at their present location since 1974 and expanded their facility a couple of years ago. Danone owns three Grandfathered Groundwater Rights (Type 2 non-irrigation rights) for a total of 163 acre-feet and operates a 952-foot well located on the property, which has a pumping capacity of 225 gallons per minute. Danone samples the well regularly and results have not shown detectable concentrations of VOCs. Prior to bottling, groundwater undergoes several treatment steps including reverse osmosis. The company has discussed the feasibility of installing an additional well on-site for back up purposes although no decisions have been made at this time.

2.2.2.3 Other Private Wells

The irrigation well located at 3600 West Osborn Road, commonly referred to as the West Osborn Complex Irrigation Well, is not currently being used. According to ADWR records, this well is not associated with any active grandfathered groundwater right or permit. The last grandfathered groundwater right associated with this well was in 1997. The Type 2 right was conveyed to an unknown party and this well was taken off of the certificate. The well has not been abandoned or capped to date; however, United Industrial Corporation will abandon the well in the near future as part of the ongoing RI at the WCP West Osborn Complex site.

2.3 SURFACE WATER USES

The Grand Canal is the only surface water body in the vicinity of the WCP East Grand Avenue WQARF Site. Water from SRP irrigation wells along the Grand Canal is discharged to the

canal, which presently serves downstream agricultural and urban irrigation customers. A drinking water treatment plant may be constructed at the end of the Grand Canal which would change the end use of the canal water requiring that water discharged to the canal meet stricter water quality criteria than what is currently required.

The Grand Canal is not fully lined in the area of the WCP East Grand Avenue WQARF Site (Figure 2-5). The canal is primarily unlined between 19th Avenue and Interstate 17 except for lined portions near Indian School Road, 23rd Avenue, and Interstate 17. The canal is lined on the south bank and on the southern half of the bottom from Interstate 17 to 27th Avenue and on the bottom and both banks from 27th Avenue to 39th Avenue.

3.0 SUMMARY OF USES

The land and water uses described in Section 2.0 most likely relevant to discussion of remedial objectives are presented below.

3.1 LAND USES

The zoning pattern in the area has been long established and there are no foreseeable changes for the future. Land uses for the VW&R facility property and within the WCP East Grand Avenue WQARF Site area are expected to remain predominantly industrial or light industrial.

3.2 GROUNDWATER USES

Current and future groundwater uses within the WCP East Grand Avenue WQARF Site area include the following:

- The COP anticipates the possible need for additional drinking water wells to augment production in the WCP area sometime in the future.
- SRP owns several irrigation wells in the area and will continue to need operational wells to supplement surface water supplies. A water treatment plant may be built on the Grand Canal sometime in the future, which would change the use of the groundwater from irrigation to drinking water.
- The Michigan Trailer Park is expected to continue to use their well to provide drinking water to park residents.
- Danone Water is expected to continue to use the well located on their property in their bottling operations.

3.3 SURFACE WATER USES

Currently, there are no surface water uses within the WCP East Grand Avenue WQARF Site.

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FIGURES

TABLES

ATTACHMENT A

GROUNDWATER MONITORING WELLS

ATTACHMENT B

PHONE CALL AND INTERVIEW NOTES